

ABSTRACT OF THE DISCLOSURE

A stage assembly for an exposure apparatus is disclosed. The stage assembly comprises a guide assembly. The guide assembly includes a guide bar, a stage, a first actuator component, and a second actuator component. The guide bar is movable in a first direction and has a center of gravity and a guiding portion. The stage is movable along the guiding portion of the guide bar in a second direction substantially perpendicular to the first direction and exerts a reaction force on the guide bar. The stage has a center of gravity spaced apart from the center of gravity of the guide bar in the first direction. The first actuator component is positioned on the guide bar. The first actuator component is aligned with the center of gravity of the stage in the second direction to apply a compensating force on the guide bar to cancel the reaction force exerted by the stage. The second actuator component is positioned on the guide bar. The second actuator component is aligned with the center of gravity of the guide bar in the second direction to apply a force on the guide bar to control a position of the guide bar in the second direction.

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